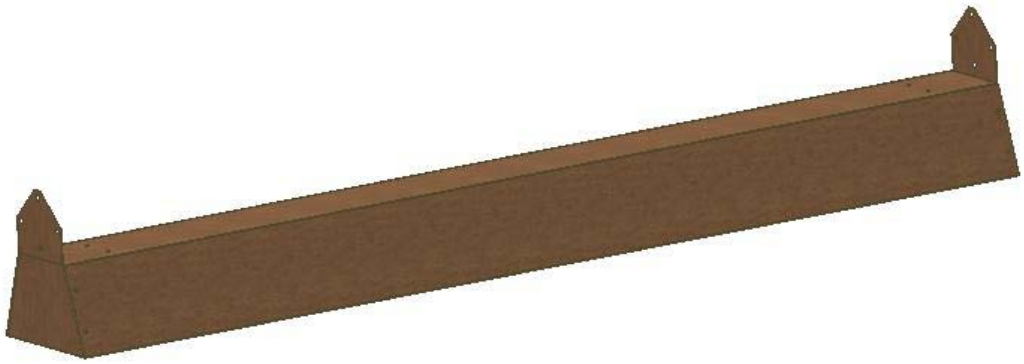
CH Series

COMFORT HEATERS
for
INDOOR* and Semi-Protected** OUTDOOR USE



*EXCLUDING RESIDENCES
**COVERED APPLICATIONS

WARNING

IMPORTANT SAFETY INFORMATION INSIDE

- **Serious injury or death possible**
- **Read, understand, and follow all safety information and instructions in this manual before using or servicing this product.**
- **Retain these instructions for future reference.**

REFER TO COMPLETE INDEX OF INFORMATION ON
PAGE 2

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ATTENTION:

The table to the right provides definitions of the signal words that can be found throughout this manual. These signal words are used to express the severity of the hazard at hand. The signal words are generally used in conjunction with safety symbols that correspond to the text for that particular hazard. As you read this manual, refer back to this table when you are unsure of the signal word definition.

SIGNAL WORD DEFINITIONS	
DANGER	DANGER indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.
WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.
CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury.
CAUTION	CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in property damage.
As defined in ANSI Z535.4-2002	

SPECIFICATIONS

DESCRIPTION

Fostoria multi-purpose CH series electric infrared heaters are designed to provide efficient spot heating for many commercial and industrial applications. All models operate with a single quartz tube emitter included with the heater, are easily installed, and are equipped with spectral reflectors for excellent radiant output. They are built with corrosion-resistant materials and are for **INDOOR and Semi-Protected OUTDOOR applications in the USA and Canada.** When used outdoors, they should be installed under a canopy or other similar type installation that is semi-protected.

⚠ WARNING

EXPLOSION HAZARD
FIRE HAZARD

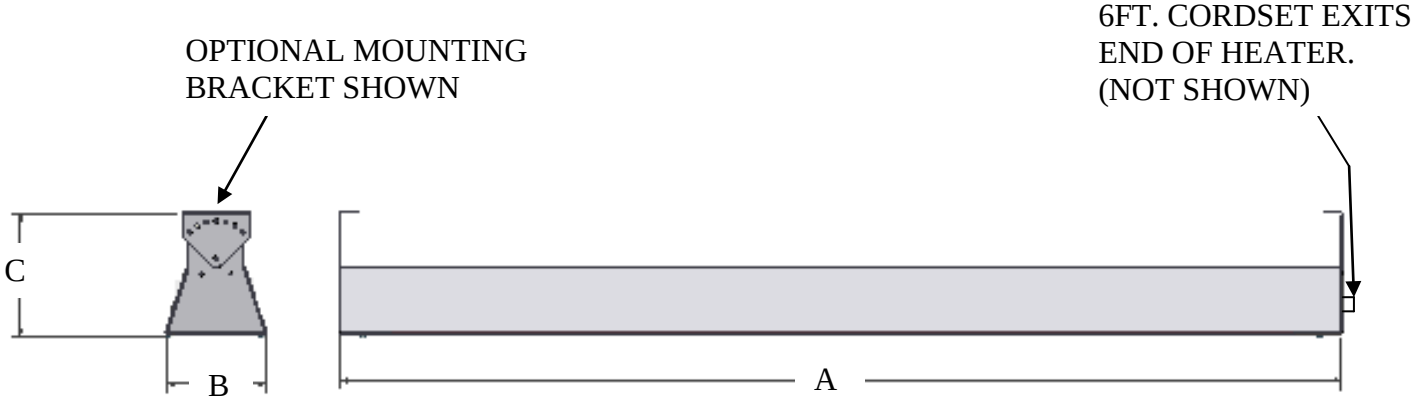
- **Serious injury or death may occur.**
- **Do not use in locations containing hazardous atmospheres.**
- **Do not use as a residential or household heater.**

SPECIFICATIONS

Housing	24 ga. Galvannealed
Finish	Hi temp. brown powder coat
Reflectors, end caps	0.040” gold anodized aluminum
Suspension	Chain or Optional Adjustment Mounting Bracket(CH-MB)

Voltage	Cordset Plugs	Matching Receptacle
120V	NEMA 5-15P	NEMA 5-15R
240V	NEMA 6-15P	NEMA 6-15R

Model	P/N	Tube P/N	Watts	Volts	Amps	Cordset	Dim A	Dim B	Dim C
CH–46C	04860002	04432302	1500	120	12.5	YES	42.0”	5.375”	6.500”
CH-57C	04860102	04414702	3000	240	12.5	YES	53.0”	5.375”	6.500”



QUARTZ TUBE INSTALLATION

WARNING

ELECTRICAL SHOCK HAZARD

- **Serious injury or death may occur.**
- **Disconnect from electrical supply before installing or servicing this heater.**
- **Reflector end caps must be installed prior to powering the unit; refer to note #3.**

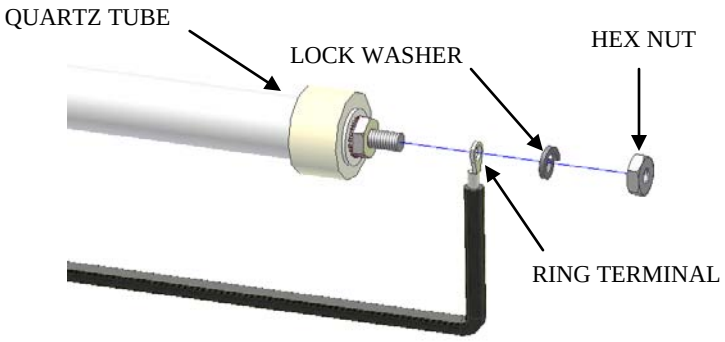
CAUTION

Install heater so that the quartz tubes are horizontal. Failure to do this may cause the heating element within the tube to sag and cause premature burnout.

Each heater is equipped with two hi-temperature silicone lead wires and a ground termination. **Make sure power source conforms to the heater requirements. Use only Fostoria quartz tubes.**

1. Insert quartz tube in the "L"-shaped slots in heater housing.
2. On each end of the quartz tube, place (1) lead wire ring terminal, (1) lock washer and (1) hex nut on the threaded stud and **tighten securely** (see image below). Lock washers and hex nuts are provided in hardware package.

NOTE – Use a second wrench to hold the inner hex nut in place while tightening the outer hex nut. Failure to securely tighten this connection will cause the element to fail prematurely.



3. Attach reflector end caps to both ends of housing using the (4) screws provided in hardware package.

HEATER INSTALLATION

MINIMUM INSTALLATION CLEARANCES

These heaters MUST be installed as follows:

- **CH-46C:**
  - **12 inches min. from a vertical surface.**
- **CH-57C:**
  - **24 inches min. from a vertical surface.**
- **72 inches minimum from ANY combustible material**
- **3 inches minimum from the ceiling**
- **36 inches minimum from other heaters**

WARNING

FIRE HAZARD

- **Serious injury or death may occur.**
- **Read and follow clearances shown in box at left for ALL CH series heater installations.**
- **Do not use inside residences.**

NOTE: For optimum spot heating performance, it is recommended that the distance from the floor should be approximately 7 to 9 feet for CH-46 models, and 8 to 10 feet for CH-57 models.

SUSPENSION ALTERNATIVES

Your CH series heater can be mounted with either the standard chain suspension or optional CH-MB(p/n-04863802), adjustable mounting bracket kit.

Standard Mounting:
The heater is to be chain-hung as shown in figure 1. Cut the 16ga. chains (two 4 foot chains are provided) to desired length. Attach chains to heater with "S"-hooks provided and suspend from overhead structure. Crimp "S"-hooks closed after assembly.

Optional Bracket Mounting Kit; CH-MB(p/n-04863802):
As an option you can mount your heater with two adjustable mounting brackets and fastening hardware. Using the mounting centers specified in figures 2 & 3, mount your adjustable mounting brackets (bends to the inside). Once mounted, assemble the heater to brackets with mounting hardware, these brackets enable the heater to be angled in 15-degree increments up to 45 degrees. This kit includes two adjustable brackets, four 10-32 x ½" screws and four 10-32 keps nuts.

CAUTION **Install heater so that the quartz tubes are horizontal. Failure to do this may cause the heating element within the tube to sag and cause premature burnout.**

⚠ WARNING

ELECTRICAL SHOCK HAZARD

- **Serious injury or death may occur.**
- **Disconnect from electrical supply before installing or servicing this heater.**
- **Read and follow installation clearance requirements on page 4**

STANDARD MOUNTING

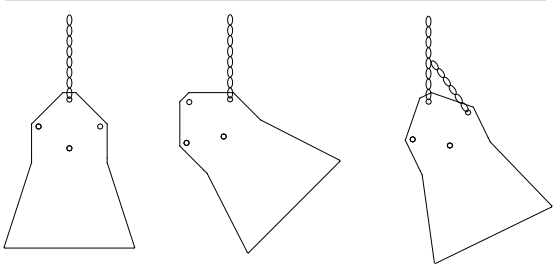


Figure 1: end view

OPTIONAL BRACKET MOUNTING

Optional mounting brackets

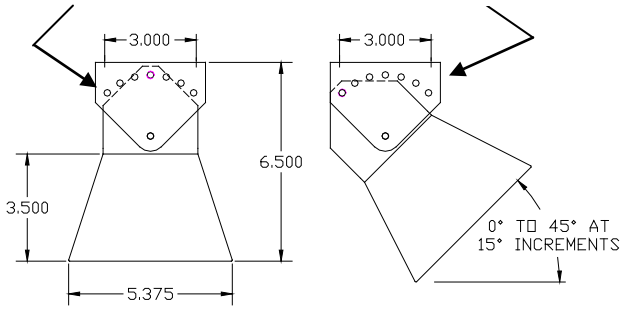


Figure 2: end view

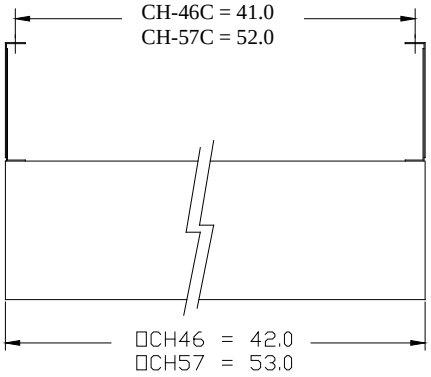


Figure 3: side view

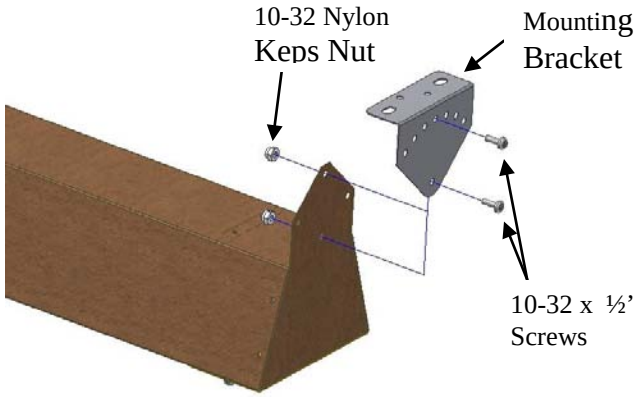
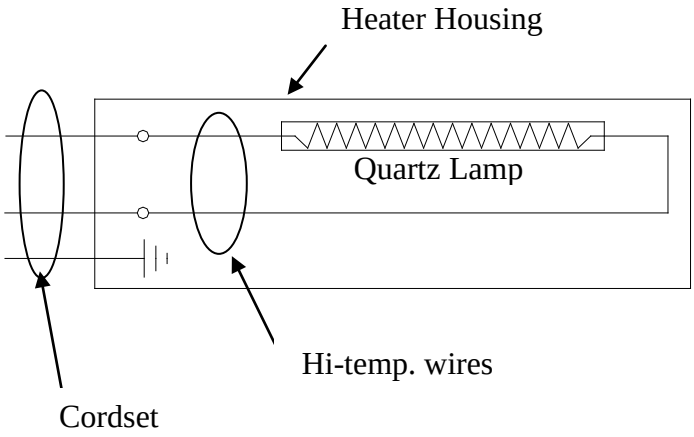


Figure 4: optional mounting view

INTERNAL WIRING DIAGRAM

CH heaters are equipped with two Hi-temperature silicone lead wires and a bonding* (ground) termination.



*Bonding is the term that describes the completion of the electrical circuit back to its source, which allows a breaker or fuse to clear if a short occurs in the line.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

- **Serious injury or death may occur.**
- **Disconnect from electrical supply before installing or servicing this heater.**
- **Read and follow all safety information in box below.**

- **Make certain the power source conforms to specifications on the heater label.**
- **Do not depend on a thermostat or other switch as the sole means of disconnecting power when installing or servicing heater. Always unplug the cordset or open the safety switch and lock it open.**
- **All wiring must be performed by a licensed electrician.**
- **The cordsets supplied with these heaters are equipped with provisions for proper bonding (grounding). Always mate the cordset plug with the proper bonded (grounded) receptacle in accordance with the National Electric Code and all governing local codes and ordinances.**
- **Do not use an extension cord to provide power to these heaters.**
- **Never connect the green or green-yellow wire to a live or "hot" conductor.**

REPLACEMENT PARTS LIST

ITEM	QTY	CH-46C PART NO.	CH-57C PART NO.	DESCRIPTION
1	1	08561801	08560401	**REFLECTOR**
2	2 4	08561201 1858		**REFLECTOR END CAP** **SCREW 8-32 X 3/8**
3	1	04432302	04414702	**QUARTZ TUBE**
4	1	3440300		**CHAIN KIT**

MAINTENANCE

1. **Always disconnect heater from power supply before performing any maintenance or service**.

2. Periodically clean the reflector with a dampened soft cloth using mild detergent. Rinse with water and wipe dry with a clean soft cloth.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

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- **Disconnect from electrical supply before installing or servicing this heater.**

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Element does not energize.	1. Defective element. 2. Improper connection.	1. Replace element. 2. Check connection to power outlet.
Not enough heat.	1. Heater too small for application. 2. Heater mounted too high or too far.	1. Add additional heater(s) 2. Decrease mounting height or distance.
Too much heat.	1. Heater too large for application. 2. Heater mounted too low or too close.	1. Replace with smaller heater. 2. Increase mounting height or distance.
Hot spot in tube.	1. Heater is not level. 2. Grease or moisture on tube.	1. Adjust to a level mount. 2. Clean tube-replace if problem persists.

Products manufactured by TPI Corporation are warranted to the original consumer to be free from defects in material and workmanship for twelve (12) months from the original purchase date.

The TPI limited warranty does not cover products that have been modified outside of our factory, damage or failure caused by acts of God, abuse, misuse, connected to or placed on other than rated voltage, abnormal usage, fault, installation, failure to follow suggested maintenance procedures enclosed with the product, improper maintenance or any repairs other than those provided by an authorized TPI service center.

There are no obligations or liabilities on the part of the Corporation for consequential damages arising out of or in connection with the use or performance of the product or other indirect damages with respect to loss of property, revenues, profit, costs of removal installation, or reinstallation.

All implied warranties with respect to TPI products, including implied warranties for merchantability and implied warranties for fitness, are limited in duration to twelve (12) months from original date of purchase, except those products or parts of products which are warranted for long periods thereon.

Some states do not allow the exclusions or limitation of incidental or consequential damages and some states do not allow limitations on how long an implied warranty lasts. The above exclusions or limitations may not apply to you.

During the warranty period, TPI Corporation will, at its sole option, repair or replace any defective parts or products returned, freight prepaid, to the TPI Corporation factory or such other locations as TPI Corporation may designate. Returned products must be packaged carefully and TPI Corporation shall not be responsible for damage in transit.

When returning parts, the owner must provide the model number of the product and nature of difficulty being experienced. This warranty does not obligate TPI Corporation to bear the cost of labor in replacing any assembly, unit or component part thereof, nor does the company assume any liability for secondary charges, expenses for installing or removal, freight or damages. There will be charges rendered for product repairs made after the warranty period has expired. Proof of purchase, including date, must accompany request for in-warranty service. In any event, TPI Corporation's maximum liability shall not in any case exceed the list price for the product claimed to be defective. This warranty gives to you specific legal rights and you may have other rights, which may vary from state to state. For the name of your nearest authorized TPI Corporation service center, please write to TPI Corporation, P.O. Box 4973, Johnson City, TN 37602.

HEATING PRODUCTS WARRANTY COVERAGE	
Heating Products Elements in	10 Years
Baseboards	1 Year
All other Heating Products	2 Years
Thermostats and Controls	

VENTILATION PRODUCTS WARRANTY COVERAGE	
Series HD or HDH Fans	5 Years
Series UHP or IHP Fans	3 Years
All other Ventilation Products	1 Year